METHOD FOR DEFINING A JOB TICKET IN A PRE-PRESS WORKFLOW SYSTEM

5   [DESCRIPTION]

FIELD OF THE INVENTION

10   The invention relates to the field of pre-press workflow
systems, and in particular to job tickets and input channels used in
such systems.

BACKGROUND OF THE INVENTION

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In a pre-press workflow system, as disclosed e.g. in patent
application WO 01/25907, jobs are processed, e.g. for commercial
printing or for the packaging industry. In commercial printing, a
job involves the processing of a specific set of document pages
20   according to specified instructions. Most modern pre-press workflow
systems are job ticket driven. Data processing activities are
controlled by job tickets. A "job ticket" defines how a job is to
be assembled and processed. It defines (for commercial printing)
the pages that are to be assembled, it defines the processing
25   features that are to be used (imposition, separation, trapping,
overprinting, rasterization which is also called rendering, etc.),
the output engine to which the rendered job will be sent. The job
ticket editor allows the user to create and modify job tickets.

In prior art systems, an input mechanism needs to be associated
30   with a job ticket. This input mechanism may contain so-called
"input channels"; e.g. Agfa's Apogee^{TM} Series 3 workflow software
lets the user attach job tickets to input channels. Typical input
channels can be TCP/IP streaming (TCP/IP stands for Transmission
Control Protocol/Internet Protocol), Appletalk^{TM}, FTP (File Transfer
35   Protocol), hot folders (a hot folder includes a location of a folder

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to which a file will be copied that is dropped in the hot folder),
etc. When a document (content) is dropped in such an input channel,
the document will be processed according to the specified job
tickets.

5   There is still a need for an improved method for defining a job
ticket in a pre-press workflow system.

SUMMARY OF THE INVENTION

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       The present invention is a method for defining a job ticket in
a pre-press workflow system as claimed in independent claim 1. The
invention also includes a system and a computer program implementing
the method. Preferred embodiments of the invention are set out in

15   the dependent claims.

       In a method in accordance with the invention, at least one
input channel is defined and the definition of this at least one
input channel is included within the job ticket. This is opposed to
the prior art, wherein the input channel definition includes one or

20   more job tickets.

       An advantage of the invention is that multiple input channels
can be defined within one job.

       Another advantage is that input channels can easily be stopped
when jobs are completed.

25   These advantages will be discussed more in detail below.
Further advantages and embodiments of the present invention will
become apparent from the following description and drawing.

30   BRIEF DESCRIPTION OF THE DRAWINGS

       The invention is described with reference to Fig. 1 without the
intention to limit the invention thereto; Fig. 1 diagrammatically
shows an embodiment of a system in accordance with the invention.

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DETAILED DESCRIPTION OF THE INVENTION

Fig. 1 diagrammatically shows an embodiment of a job ticket 10 in accordance with the invention; the job ticket 10 includes three
5 input channels 11-13. In fact, Fig. 1 represents a portion of a job ticket 10, namely a so-called "production plan", and only the first part thereof. A production plan specifies how a job is to be processed; in Fig. 1, the data are processed according to the shown steps and in the direction of the arrow, i.e. from left to right. A
10 job ticket 10 defines how a job is to be assembled and processed; a job ticket contains a production plan and additional data.

The embodiment shown in Fig. 1 includes three different input channels 11, 12 and 13. Input channel 11 is a hot folder "IN1", input channel 12 is an Appletalk^{TM} channel, "IN2", and input channel
15 13 is another hot folder "IN3". The definition of input channel 11 includes the location of the folder, on disk, to which files will be copied that are dropped in the hot folder (if e.g. a CD-ROM is delivered with files for the concerned job, all files on the CD-ROM will be copied to this folder, possibly after a check that they
20 comply with specific conditions). The definition of input channel 11 further includes the expected file type, in this case either PS (PostScript^{TM}) or PDF (Portable Document Format^{TM}). Input channel 12 is defined as an Appletalk^{TM} channel (i.e. for streaming input). It accepts files from a network of MacIntosh^{TM} computers, that deliver
25 data directly; the input channel 12 behaves for these computers -- analogously to a printer. Input channel 13 is defined as a hot folder accepting TIFF files (TIFF stands for Tag Image File Format).

This example illustrates that different settings may be defined for different input channels in a job. In the example, the file
30 type has to be PS or PDF, for input channel 11, respectively TIFF, for input channel 13. This mechanism easily and clearly allows for checks, such as the check for a file type.

Different processing steps may also be defined for different input channels in a job. Referring again to Fig 1, suppose that
35 input channel 13 delivers input from another department within the

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company, and that this· input has to be checked more strictly than
the input from input channels 11 and 12. For these two input
channels 11, 12 the usual normalizing step 21, "NRM", and the usual
preflighting step 31, "PREF" are applied, whereas for input channel

5   13 another, stricter normalizing step 22, "NRM$_S$" and another,
stricter preflighting step 32, "PREF$_S$", are used (a normalizer
creates reliable PDF-files from the incoming files, while a
preflight tool verifies critical elements, such as font embedding or
image quality, of files).

10   An advantage of the invention is that input channels can easily
be stopped when jobs are completed, or when the state of a job
changes in some other way. Suppose e.g. that a particular job
received all its documents; when the job reaches this state, the job
may automatically stop its input channels. This is a protection

15   against further, erroneous documents being input. If an input
channel is stopped, it will no longer deliver input. Stopping a hot
folder input channel may be implemented by still storing documents
in the folder associated with the hot folder, but no longer
processing them; stopping an input channel for streaming input may

20   be implemented by removing the stream channel; preferably, the
definitions of the input channels are preserved when they are
stopped. In this way, stopped input channels can easily be
reactivated.

            Another advantage of the invention is that, preferably, all

25   input channels of a job are deleted if a job is deleted; a separate
clean-up operation of the input channels is thus not necessary.

            It is preferred that an input channel only refers to a single
job. When the job is submitted for execution, this allows to check
for.possible conflicts - e.g. a hot folder may not be in use by

30   another job.

            Yet another advantage of the invention is that input channels
may be stored together with the job in the job ticket, which allows
for better system consistency. In a preferred embodiment, by means
of the job ticket editor the input mechanisms for the specified job

35   are set up and the input channel definitions are· stored within the

job ticket. Job tickets may be stored in an extendable standard
format like Adobe's PJTF (Portable Job Ticket Format) or the Job
Definition Format, JDF, from CIP4.

5   Having described in detail preferred embodiments of the current
invention, it will now be apparent to those skilled in the art that
numerous modifications can be made therein without departing from
the scope of the invention as defined in the appending claims.

List of reference signs

    10 : job ticket

    11 : input channel

5   12 : input channel

    13 : input channel

    21 : normalizer

    22 : normalizer

    31 : preflight tool

10   32 : preflight tool